AMENDMENTS TO THE CLAIMS

1 (Currently amended). A mineral fibre product comprising fibres formed of a silicate network and comprising silicon, calcium, magnesium, iron, aluminium, oxygen and optionally alkali metal ~~atoms~~ characterised in that the fibres have an analysis (expressed as % by weight oxides) including at least 3% FeO_t ~~and~~ 0 to 8% alkali metal oxide and at least 5% MgO, in that at least 70% of the iron is ferric in that the fibres have a core surrounded by an outer surface layer less than 1 μm thick in which the peak concentration of magnesium atoms is at least 1.5 times the concentration of magnesium atoms in the total fibre.

2 (Original). A product according to claim 1 in which the surface layer has a peak concentration of calcium atoms greater than the concentration of calcium atoms in the total fibre.

3 (Original). A product according to claim 2 in which the surface layer has a peak concentration of calcium atoms at least 1.5 times the concentration of calcium atoms in the total fibre.

4 (Currently amended). A product according to ~~any preceding~~ claim 1 in which the surface layer has a peak concentration of iron atoms at least 1.2 times the concentration of iron atoms in the total fibre.

5 (Currently amended). A product according to ~~any preceding~~ claim 1 in which the surface layer merges with the core and has been formed by outwards diffusion of magnesium ions to the surface of the fibres.

6 (Currently amended). A product according to ~~any preceding~~ claim 1 in which the peak concentration of magnesium is at least 2 times ~~and preferably at least 4 times~~ the concentration of magnesium in the total fibre.

7 (Currently amended). A product according to ~~any preceding~~ claim 1 in which at least 95% of the iron is ferric.

8 (Currently amended). A product according to ~~any preceding~~ claim 1 in which the fibres have an analysis (expressed as % by weight oxides) including at least 3% FeO, 0 to 8% alkali metal oxide, 33 to 55% SiO_2, at least 8% CaO, at least 5% MgO and up to 25% $A1_2O_3$.

9 (Currently amended). A product according to ~~any preceding~~ claim 1 in which the fibres are fibres which have been formed by centrifugal fiberisation of a melt in which the iron is mainly ferrous.

10 (Currently amended). A product according to ~~any preceding~~ claim 1 comprising a batt or web wherein the fibres having the surface layer are distributed substantially uniformly throughout the batt or web.

11 (Currently amended). A product according to ~~any preceding~~ claim 1 comprising a batt comprising the fibres having the surface layer and a non-combustible system for improving the structural integrity of the batt, wherein the system is selected from needling of the batt, an inorganic bonding agent, and sewing of the batt by inorganic threads.

12 (Currently amended). A product according to ~~any preceding~~ claim 1 in the form of a fire door or sandwich panel comprising ~~which has been made by forming~~ a batt comprising the fibres having the surface layer ~~and then~~ partly or wholly ~~enclosing the batt~~ enclosed within sheet materials.

13 (Currently amended). A method of treating mineral fibres formed of a silicate network to improve their high temperature properties wherein the fibres comprise silicon, calcium, magnesium, iron, aluminium, oxygen and optionally alkali metal ~~atoms~~, characterised in that the fibres have an analysis (expressed by weight oxides) including iron in an amount of at least 3% measured as FeO and in which there is at least 2% iron (measured as FeO) present as ferrous iron, 0 to 8% alkali metal oxide and at least 5% MgO, and the method comprises exposing the fibres containing at least 2% by weight ferrous iron under oxidising conditions to a controlled increased temperature which is above the temperature at which oxidation of the iron in the fibres occurs but which is below the temperature at which substantial network crystallisation occurs and thereby oxidising the ferrous iron to provide fibres in which at least 70% of the total iron is ferric.

14 (Currently amended). A method according to claim 13 in which the fibres are exposed under oxidising conditions to a temperature which is at least ~~Tg~~ the glass transition temperature less 50°C ~~(and preferably at least Tg)~~ but below the crystallization temperature ~~Tc (preferably not more than Tg+100°C)~~.

15 (Currently amended). A method according to ~~claim 13 or~~ claim 14 in which the controlled increased temperature is increased during the process.

16 (Original). A method according to claim 15 in which the rate of increase of the temperature to which the fibres are subjected at temperatures above ~~Tg~~ the glass transition temperature less 20°C is less than 20°C per minute.

17 (Currently amended). A method according to ~~any of claims 13 to 15~~ claim 13 in which the fibres are initially formed by centrifugal fiberisation of a melt formed in a cupola furnace.

18 (Currently amended). A method according to ~~any preceding~~ claim 13 in which the fibres are formed and collected as a batt or web and the batt or web is then exposed to the controlled increased temperature in a heated, forced draft, oven.

19 (New). A method according to claim 13 in which the fibres are exposed under oxidising conditions to a temperature which is at least the glass transition temperature but below the glass transition temperature plus 100°C.

20 (New). A product according to claim 8 in which the surface layer has a peak concentration of calcium atoms at least 1.5 times the concentration of calcium atoms in the total fibre and a peak concentration of iron atoms at least 1.2 times the concentration of iron atoms in the total fibre and a peak concentration of magnesium is at least 4 times the concentration of magnesium in the total fibre, in which at least 95% of the iron is ferric, and in which the surface layer merges with the core.